## CLASSIFICATION OF PRODUCTS FOR ALIGNMENT WITH SUPPLY CHAIN STRATEGY

chains possess the capability to respond successfully to customer, market and supply uncertainty (Lee 2002).



Exhibit 1. Fisher's Framework (Fisher 1997).

The concept of aligning functional products with

Payne and Peters (2004) utilized seven (7) product characteristics the original equipment manufacturer deemed important in the development of their Product Supply Characterization (PSC) model. In all cases the suppliers who provide parts to the supply chain were not consulted for input on the characteristics.

All three of these methods recommended numbers of product characteristics that are significantly lower than the fifteen developed by Harris et al. Aitken et al. (2003) state, "To keep a handle on any classification The questions were then randomly sorted using the RANDBETWEEN function in Microsoft ® Office Excel 2003 to randomly assign the order of the product characteristics.

## **Questionaire Distribution**

An existing Department of Defense avaiton platform supply chain was chosen to evaluate if the proposed method was more comprehensive than the existing methodolgies. Questionnaires where: n = sample size  $T = \hat{U} [R(Xi) - R(Yi)]^2$  for i = 1 to n (2) R(Xi) = rank of the first data set R(Yi) = rank of the second data set

A positive indicates that positive correlation exists like wise a negative indicates that a negative correlation exists. However, this analysis alone does not determine if sufficient evidence exists to make statistical inferential conclusions on the data. Spearman's Rho permits hypothesis testing to determine if Xi and Yi are mutually independent (H0) or that there is a tendency for the larger values of X to

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